

Kennebec Telephone Company, Inc. – Supplemental Discovery Request Responses

DR 21 – Documentation of Underlying Transport Price

The following is a pricing estimate summary for Inter-Exchange Transport equipment locations. The pricing shown provides a range between the small sites and the large sites for respective locations for Kennebec Telephone Company included in the FLEC model. The pricing variation between sites is influenced by the quantity and type of circuit interfaces that terminate in each particular office.

Inter-Exchange Transport Costs

Company:

Kennebec Telephone Company

Exchanges	OC-192	OC-48	DS-1	DS-3	10/100 Base T	Gigabit Ethernet	Base Cost	Line Cost	Trib. Cost	OSP Cost
Kennebec	2	0	56	0	4	0	\$ 32,900.00	\$ 54,400.00	\$ 19,000.00	\$ 879,972.80
Presho	2	0	28	0	4	0	\$ 32,900.00	\$ 54,400.00	\$ 12,700.00	
Sub Totals	4	0	84	0	8	0	\$ 65,800.00	\$ 108,800.00	\$ 31,700.00	\$ 879,972.80
Total Transport Costs										\$ 1,086,272.80

Assumptions:

Two OC-192 optics modules are equipped at each location.
 Construction costs include provisions associated with splicing, conduit, directional boring, etc.
 All Facilities between exchanges would be owned solely by Kennebec Telephone Company.
 Kennebec Telephone Company would construct the interexchange transport network with a single BFO 48.
 Projected cable placements are based on the most probable and direct routes.
 Rural fiber cost was based on \$8560 per mile plus 15% for engineering and taxes.
 Town fiber cost was based on \$11.93 per foot plus approximately 15% for engineering and taxes.
 All electronics costs include 10% for installation.
 All electronics and OSP costs include 15% for engineering and taxes.

In addition, the following tables provide details concerning the equipment descriptions and quantities for the Inter-Exchange Transport Costs estimates at each respective location. The individuals units are categorized in terms of Base Cost, Line Cost, and Tributary Cost. The total pricing for each category is provided in each table, along with a “loaded” total for each category. The “loaded” total includes a 10% factor for installation labor and materials costs. Similarly, a 15% loading was included for miscellaneous items such as taxes and engineering services.

Kennebec Telephone Company
Inter-Exchange Transport Detailed Estimates

NAME	UNIT PRICE	Base Quantity	Base Cost	Line Quantity	Line Pricing	Kennebec Tributary Quantity	Kennebec Tributary Pricing	Presho Tributary Quantity	Presho Tributary Pricing
SHELF, COMMONS & SWITCH FABRICS									
Shelf Assembly, w/ DS1 Connectors	\$ 1,800.00	1	1,800.00						
FAN2 Fan Module	\$ 93.00	4	372.00						
Central Processing Unit, Software Preloaded	\$ 2,521.00	1	2,521.00						
Data Communication Channel Unit, Software Preloaded	\$ 2,089.00	1	2,089.00						
Alarm Interface Unit -	\$ 916.00	1	916.00						
Synchronization Unit	\$ 779.00	2	1,558.00						
STS Switch Fabric	\$ 3,198.00	2	6,396.00						
VT1.5 Switch Fabric	\$ 1,853.00	2	3,706.00						
OPTICAL INTERFACE CARDS									
OC-192 1550nm, SMF, EC	\$ 21,352.00			2	42,704.00				
OC-192 1550nm, SMF, SC	\$ 21,352.00								
ELECTRICAL & TRANSMUX INTERFACE CARDS									
DS3/EC1 Switch Unit -	\$ 841.00								
DS3/EC1 Interface Card - 8 ports per card	\$ 2,326.00								
12 channel M13 Transmux server unit	\$ 4,846.00								
DS1 28-Port unit, 1:1 Protection	\$ 2,731.00					4	10,924.00	2	5,462.00
DATA INTERFACE CARDS									
2-port GigE 850nm SR	\$ 6,698.00								
2-port GigE 1310nm LR	\$ 7,703.00								
4-port 10/100BaseT	\$ 4,448.00					1	4,448.00	1	4,448.00
CIRCUIT BREAKER									
Circuit breaker panel	\$ 1,261.00	1	1,261.00						
Circuit breaker individual 25 Amp Breakers (alarm only when tripped)	\$ 23.00	2	46.00						
MISC ITEMS									
Paper Documentation	\$ -								
Documentation on CD-ROM	\$ -	1							
EMS Software	\$ 3,750.00	1	3,750.00						
Filler Panel 1, Blank card for Vacant Large slots	\$ 58.00	3	174.00						
Filler Panel 2, Blank card for Vacant Small slots	\$ 43.00	20	860.00						
Air Filter Replacement Kit (set of four)	\$ 38.00								
MISC CABLES									
POWER CABLES									
Power Cable Set	\$ 110.00	1	110.00						
TIMING CABLES-see Note 2									
External Clock Cable Assembly Primary (In and Out)	\$ 41.23	1	41.23						
External Clock Cable Assembly Secondary (In and Out)	\$ 41.23	1	41.23						
ALARM CABLES-see Note 2									
Office Alarm Cable Set	\$ 78.60	1	78.60						
HK CABLES-see Note 2									
Houskeeping Alarm Cable Assembly 1 (In)	\$ 40.86	1	40.86						
Houskeeping Alarm Cable Assembly 2 (In)	\$ 40.86	1	40.86						
Category Total Cost			\$ 26,000.00	\$ 43,000.00	\$ 15,000.00	\$ 10,000.00			
Loaded Category Total Cost			\$ 32,900.00	\$ 54,400.00	\$ 19,000.00	\$ 12,700.00			

The pricing shown in the "Inter-Exchange Transport Detailed Estimates" for the respective sites was based off a commonly deployed SONET platform. The particular SONET platform assumed for this design provides the ability to interface a variety of circuit interface types including DS-1, DS-3, EC-1, 10/100BaseT, Gigabit Ethernet, OC-3, OC-12, OC-48, and OC-192. The port cards available for the SONET terminals include 28-port DS-1 circuit cards, 8-port DS-3 circuit cards, 4-port 10/100 Base T circuit cards, and 2-port Gigabit Ethernet circuit cards. The OC-192 circuit cards assumed in the FLEC engineering design model are single port interface cards. The quantities of DS-1, DS-3, 10/100 BaseT, and Gigabit Ethernet circuit interfaces equipped at each respective location are based upon the standard port densities of the various circuit interface cards.

- (a) The information concerning the items that are included in the Base Cost, Line Cost, and Tributary Cost are described in the response to DR 20. The estimates include costs for a fully-redundant system including processors, power supplies, switch fabric, cooling fans, and circuit interface cards.
- (b) The quantity of circuit interfaces included for each respective site correlate to the circuit interfaces required for the switching network architecture.
- (c) The source of the unit investment associated with the Inter-Exchange Transport electronics estimates is based upon typical equipment pricing levels for companies of comparable size to Kennebec Telephone Company.